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# *Adenocalymma ubatubensis* Assis & Semir, a New Species of Bignoniaceae from Ubatuba, São Paulo State, Brazil

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**ABSTRACT.** *Adenocalymma ubatubensis*, a new species from southeastern coastal Brazil, is described and illustrated. The species is distinguished by its large pseudostipules and calyx without nectaries.

*Adenocalymma* is the second largest genus of the tribe Bignonieae (Bignoniaceae), with ca. 50 species in tropical America. Most species have a restricted distribution, and in a recent study (Gentry, 1993) six new species were described from eastern South America.

A study of recent collections of *Adenocalymma* for the "Flora Fanerogâmica do Estado de São Paulo" project revealed a distinct new species related to *A. hatschbachii* A. H. Gentry and *A. ackermanii* Bureau & K. Schumann. The new species and *Adenocalymma hatschbachii* occur in the Atlantic rainforest of southeastern coastal Brazil, while *A. ackermanii* is known only from the type collected in Minas Gerais state.

***Adenocalymma ubatubensis*** Assis & Semir, sp. nov. TYPE: Brazil. São Paulo: Ubatuba, Picinguaba, 9 May 1990 (fl), *R. Romero et al.* 74 (holotype, HRCB; isotypes, MO, SP, UEC). Figure 1.

Scandens, ramis junioris dense tomentosis, glabrescentis, pseudostipulae magnae foliaceae. Folia bifoliolata, interdum cirrho simplici, foliola ovato-oblonga vel subelliptica, apice acuto vel acuminato, base rotundata, subcordata, supra subvillosa tandem glabrata, subtus densa subvillosa, pilosa, pilis simplicibus vel ramosis. Inflorescentiae axillares racemosae, bracteis et bracteolis tomentosis et eglandulosis. Flores calyce campanulatos extus tomentosos, eglandulosos, corolla campanulata, lutea, basi glabra, supra dense tomentosa, stamina inclusa. Capsula ignota.

Lianas, branchlets densely tomentose when young, soon glabrate when older, without interpetiolar nectaries (glandular fields), lenticellate; the two basal leaflets of each leaf forming pseudostipules, 1.1–3.5 × 0.4–1.4 cm, persistent in inflo-

rescence base, elliptic, obovate-elliptic to spatulate, acute to slightly rounded, mucronulate, base attenuate, enlarged, both faces tomentose, with venation subparallelodromous to mixed craspedodromous, 5–7 main nerves raised below, few inconspicuous nectaries. Leaves 2-foliolate, the terminal leaflet replaced by a simple tendril; petioles (1.2–2.6 cm) and petiolules (0.6–4 cm) tomentose to subvillose; blades 5.5–17.5 × 2–6.7 cm, ovate-oblong to subelliptic, apex acute to shortly acuminate, base rounded to subcordate, margin slightly revolute, intramarginal vein inconspicuous, chartaceous, tomentose, subglabrate, scabridulous and subpilose above, muriculate on nerves, venation gradually raised, densely tomentose to subvillose below, simple or forked slightly uncinat trichomes, few punctate, nerves raised. Inflorescence ca. 10 cm, axillary, racemiform to subcorymbiform; bracts and bracteoles 7–10 × 2–4 mm, tomentose, without nectaries. Flowers yellow, calyx 1.3–1.5 × 0.7 cm, margin 5-denticulate, nerves raised above, thick, tomentose outside, without nectaries, papillose inside; corolla 5–6 cm, infundibuliform, basal tube (ca. 1.5 cm) glabrous, toward apex densely tomentose outside, lobes ca. 1.5 cm, subtomentose faces, inside at the level of stamen insertion with glandular trichomes; stamens included, longest pair 1.7–2.6 cm, shortest pair 0.5–1.9 cm, anthers 4 mm long, with thecae divergent; ovary oblong, subtetragonal, glabrous or with scattered trichomes, simple or forked, punctate, glandular; the ovules biseriate in each locule, ca. 18 to series. Fruit not seen.

**Distribution.** Known only from the types collected in coastal plains (restinga) of northern São Paulo state.

*Adenocalymma ubatubensis* has a calyx without nectaries and long pseudostipules (1.1–3.5 cm long), densely tomentose and with conspicuous nerves raised, more or less parallel, that differentiate this new species from all species circumscribed in the genus. Two related species, *Adeno-*



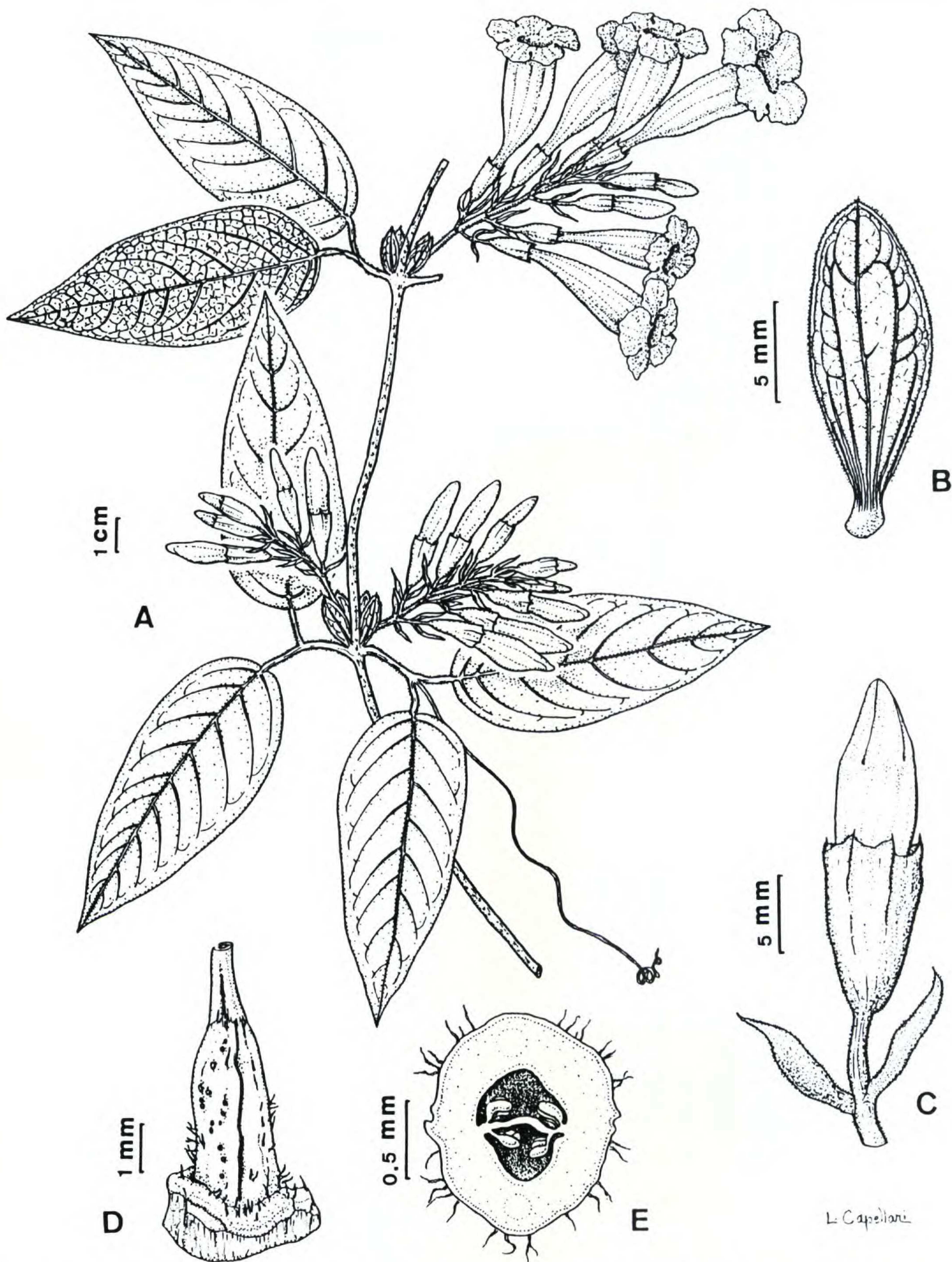


Figure 1. *Adenocalymma ubatubensis* Assis & Semir. —A. Flowering branch. —B. Pseudostipule. —C. Bud showing calyx and bracteoles without nectaries. —D. Ovary and disc. —E. Ovary cross section. (R. Romero et al. 74.)

*calymma ackermanii* and *A. hatschbachii*, also have eglandular calyces. *Adenocalymma hatschbachii*, which also occurs in the Atlantic rainforest, differs in having smaller (5 mm), subulate, and non-to-

mentose pseudostipules (Gentry, 1993). Moreover, *A. hatschbachii* has membranaceous and only puberulous, long-acuminate leaflets, with stamens more or less exserted. The other species, *Adeno-*



*calymma ackermanii*, has a similar form of pseudostipules, but these are more acute and puberulous (Bureau & Schumann, 1896–1897). It also differs in the smaller leaflets and in the fewer number of ovules in the locule (only 26).

Another species with conspicuous pseudostipules is *Adenocalymma prancei* A. H. Gentry. However, the pseudostipules of that species are linear-oblong and measure up to 1.3 cm long (Gentry, 1978). It also differs in having a glandular calyx and in occurring in central and upper Amazonia.

*Paratype.* BRAZIL. **São Paulo:** Ubatuba, Picinguaba, 6 May 1988 (fl), R. Costa et al. 14 (HRCB, UEC).

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